

IN THE ABSTRACT:

Please amend the Abstract as indicated below:

Generally, a method and apparatus are disclosed that store sequential data units of a data packet received at an input port in contiguous banks of a buffer in a shared memory, 5 thereby obviating any need for storing linkage information between data units. Data packets can extend through multiple buffers (next-buffer linkage information is much more efficient than next-data-unit linkage information). According to another aspect of the invention, buffer memory utilization can be further enhanced by storing multiple packets in a single buffer. For each buffer, a buffer usage count is stored that indicates the sum (over all packets represented in 10 the buffer) of the number of output ports toward which each of the packets is destined.